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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/228,894	01/11/1999	YOSHIHIRO ONO	P/3281-5	7984

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EXAMINER

TRAN, CON P

ART UNIT	PAPER NUMBER
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2644

19

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/228,894

Applicant(s)

ONO, YOSHIHIRO

Examiner

Con P. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1-21-04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 8 is/are rejected.
- 7) ☒ Claim(s) 1-7,9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1 and 8** are rejected under 35 U.S.C. 102(b) as being anticipated by Yun U.S. Patent 4,507,524.

Regarding **claim 1**, Yun teaches a voice switching system (see Fig. 1,2, 3, and respective portions of the specification), comprising:

a transmitting side attenuation section (48) for attenuating a microphone input voice signal (from microphone 10; see col. 3, lines 13-22) having a first level to produce a transmitted voice signal having a second level (see col. 3, lines 23-32);

a receiving side attenuation section (57) for attenuating a received voice signal having a third level to produce a speaker (20; see col. 3, lines 13-22) output voice signal having a fourth level (see col. 3, lines 32-54);

a transmitting side control section (including band pass filters 41,45, rectifiers 42,44, comparator 43, time constant circuit 46, non-inverting amplifier 47, and variable resistor 49) for comparing the first level of the microphone (10) input voice

signal with the fourth level of the speaker (20) output voice signal to obtain a first difference therebetween (at comparator 43), the transmitting side control section controlling, dependent on the first difference, an amount of attenuation of the microphone input voice signal in the transmitting side attenuation section (see col. 3, lines 22-41 and col. 4, lines 8-23); and

a receiving side control section (including band pass filters 51,54, rectifiers 52,53, comparator 50, time constant circuit 46, inverting amplifier 56, and variable resistor 55) distinct from the transmitting side control section and for comparing the second level of the transmitted voice signal with the third level of the received voice signal to obtain a second difference therebetween (at comparator 50), the receiving side control section controlling, dependent on the second difference, an amount of attenuation of the received voice signal in the receiving side attenuation means (see col. 3, line 42 - col. 4, line 23).

Regarding **claim 8**, Yun teaches a voice switching system (see Fig. 1,2, 3, and respective portions of the specification), comprising:

a first receiver (microphone 10), which receives a first voice signal (from microphone; see col. 3, lines 13-22);

a first attenuation circuit (variable amplifier 48), which receives the first voice, signal from the first receiver (10) and produces a first attenuated signal (to hybrid 30; see col. 3, lines 13-32);

a first control circuit (including band pass filters 41,45, rectifiers 42,44, comparator 43, time constant circuit 46, non-inverting amplifier 47, and variable resistor 49) coupled to the first attenuation circuit (variable amplifier 48; see col. 3, lines 13-32);

a second receiver which receives a second voice signal (from hybrid 30 to variable amplifier 57; see col. 3, lines 55-62);

a second attenuation circuit (variable amplifier 57) which receives the second voice signal from the second receiver and produces a second attenuated signal (to speaker 20; see col. 3, lines 42-62); and

a second control circuit (including band pass filters 51,54, rectifiers 52,53, comparator 50, time constant circuit 46, inverting amplifier 56, and variable resistor 55) distinct from the first control circuit and coupled to the second attenuation circuit (variable amplifier 57; see col. 3, lines 13-32 and col. 3, lines 46-54); wherein

the first control circuit (including band pass filters 41,45, rectifiers 42,44, comparator 43, time constant circuit 46, non-inverting amplifier 47, and variable resistor 49) receives the first voice signal (from microphone 10) and the second attenuated signal (output of variable amplifier 57 ), the first control circuit compares the first voice signal and the second attenuated signal (at comparator 43) and produces a first attenuation control signal (output of non-inverting amplifier 47) in response thereto, the first attenuation control signal controls an attenuation of the first attenuation circuit (variable amplifier 48; col. 3, lines 13-41); and

the second control circuit (including band pass filters 51,54, rectifiers 52,53, comparator 50, time constant circuit 46, inverting amplifier 56, and variable

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resistor 55) receives the second voice signal (from hybrid 30 to variable amplifier 57; see col. 3, lines 55-62) and the first attenuated signal (output of variable amplifier 48), the second control circuit compares the second voice signal (at comparator 53) and the first attenuated signal (output of variable amplifier 48) and produces a second attenuation control signal (output inverting amplifier 56) in response thereto, the second attenuation control signal controls an attenuation of the second attenuation circuit (variable amplifier 57; col. 3, line 42 - col. 4, line 23).

***Allowable Subject Matter***

5. **Claims 2-7 and 9-10** are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

Regarding to **claims 2, 4, 9, and 10**, the cited prior art provided numerous examples of different voice switching system but failed to disclose or fairly suggest the specific combination of structural and functional limitations set forth in claims 2, 4, 9, and 10, specifically the structure and functional relationship of: a transmitted voice signal with delay time and a received voice signal without delay time (claims 2 and 10); a received voice signal with delay time and a transmitted voice signal without delay time (claims 4 and 9).

Regarding to **claim 6**, this claim is objected to for reasons stated above, but would be allowable matter due to dependence from claim 4 if corrected as suggested.

**Claim 3** would be allowable as being dependent on dependent claim 2.

**Claim 5** would be allowable as being dependent on dependent claim 4.

**Claim 7** would be allowable as being dependent on dependent claim 6.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1 and 8 have been fully considered but they are not persuasive.

Applicant asserts on pages 4-5:

"When reviewing Figures 2, 3b, and 3c, at no time is the signal attenuated. There may be less gain applied to the signal but the signal is not attenuated. Reducing gain is not the same as attenuating. Reducing gain means that while the signal is amplified, it is not amplified as much as it could be whereas attenuating the signal means that it is reduced from the input level. . . because Yun reference fails to disclose the explicitly recited attenuators"

Examiner respectfully disagrees. As curve (A) of amplifier (48) decreases below unity (e.g., 0.1), output level is one-tenth of the input level, i.e., nine-tenth of the input level has been attenuated by the amplifier. Thus, the amplifier does the same work in substantially the same way, and accomplishes the same result as an attenuator.

As such, the claims remain rejected.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Con P. Tran, whose telephone number is (703) 305-2341. The examiner can normally be reached on M - F (8:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.



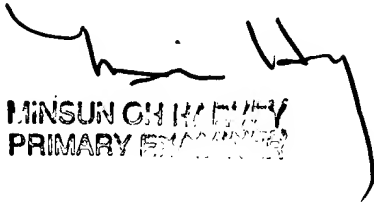
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office at telephone number (703) 306-0377.

cpt CPJ  
March 12, 2004

  
MINSUN CHOI  
PRIMARY EXAMINER